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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,334	09/24/2003	Yu-Tung Huang	38699-8035US	5674

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EXAMINER

WILLIAMS, ALEXANDER O

ART UNIT

PAPER NUMBER

2826

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/671,334	Applicant(s) HUANG ET AL.	
	Examiner Alexander O. Williams	Art Unit 2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/28/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7-9, 11 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3, 7-9, 11 and 22-25 is/are allowed.
- 6) ☒ Claim(s) 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Serial Number: 10/671334 Attorney's Docket #: 38699-8035US

Filing Date: 9/24/2003;

Applicant: Yu-Tung Huang

Examiner: Alexander Williams

Applicant's Amendment filed 4/26/06 to the election without of Group I (claims 1 to 21), filed 7/15/04, has been acknowledged.

Claims 4, 5, 6, 10, and 12-21 have been canceled.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

Initially, and with respect to claim 26, note that a "product by process" claim is directed to the product per se, no matter how actually made, In re Hira, 190 USPQ 15 at 17 (footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Wertheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); In re Fitzgerald, 205 USPQ 594, 596 (CCPA); In re Marosi et al., 218 USPQ 289 (CAFC); and most recently, In re Thorpe et al., 227 USPQ 964 (CAFC, 1985) all of which make it clear that it is the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that Applicant has burden of proof in such cases as the above case law makes clear.

Claim 26 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Gilleo et al. (U.S. Patent Application Publication # 2005/0056946 A1) in view of Applicant's Prior Art figures 1A-1F.

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26. Gilleo et al. (figures 1 to 5) specifically figure 5 show a package assembly for an electronic device **3** having a lower surface having electrodes **27** thereon, comprising: a substrate **7** having a first surface with a first plurality of contact pads **39**; and a buffer layer **45** disposed substantially on said substrate and having an opening to expose said first plurality of contact pads, wherein said buffer layer has a first part with a first density and a second part with a second density greater than said first density. Applicant's claim language of "formed by being uniformly pressed downwardly by said lower surface of said electronic device" is language concern with the method on which the structure was formed. The Examiner is interested in finding the final structure claimed by Applicant, therefore, the method in which the device is formed is given little weight is the examination of the claimed structure.

Applicant Prior Art figure 1B show a package assembly for an electronic device, comprising: a substrate **220** having a first surface with a first plurality of contact pads **(shown but not labeled)** and a second plurality of contact pads **(shown but not labeled)**, a second surface with a plurality of connection pads (shown but not labeled), and a plurality of via holes (metal traces within the substrate) connecting said first plurality of contact pads and said plurality of connection pads for the purpose of providing electrical connection to external devices.

Therefore, it would have been obvious to one of ordinary skill in the art to use the teaching of Applicant's Prior Art figure 1B substrate to modify Gilleo et al.'s device substrate for the purpose of providing electrical connection to external devices.

As to the grounds of rejection under section 103, see MPEP § 2113.

Claims 1-3, 7-9, 11 and 22-25 are allowed.

Response

Applicant's arguments filed 4/26/06 have been fully considered, but are moot in view of the modified grounds of rejections detailed above as to claim 26. Applicant's arguments has been considered. Applicant's claim language of "formed by being uniformly pressed downwardly by said lower surface of said electronic device" is language concern with the method on which the structure was formed. The Examiner is interested in finding the final structure claimed by Applicant, therefore, the method in which the device is formed is given little weight is the examination of the claimed structure.

The insertion of Applicant's additional claimed language, for example, "in claim 1 and 22-25" cause for further search and consideration to make this action final.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY

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PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE
OF THIS FINAL ACTION.

Field of Search	Date
U.S. Class and subclass: 257/778,680,774,772,779,737,734,738,690,691,696,698,6 68,787,784,786,700,701,758,783 310/348,313 R,340,344 174/260,261 361/760,772,777 385/14,49,91 333/133,193	9/13/04 4/8/05 9/15/05 7/5/06
Other Documentation: foreign patents and literature in 257/778,680,774,772,779,737,734,738,690,691,696,698,6 68,787,784,786,700,701,758,783 310/348,313 R,340,344 174/260,261 361/760,772,777 385/14,49,91 333/133,193	9/14/04 4/8/05 9/15/05 7/5/06
Electronic data base(s): U.S. Patents EAST	9/14/04 4/8/05 9/15/05 7/5/06


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander O Williams whose telephone number is (571) 272 1924. The examiner can normally be reached on M-F 6:30-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272 1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AOW
7/5/06



Primary Patent Examiner
Alexander O. Williams